IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please ADD claim 10 in accordance with the following:

1. (PREVIOUSLY PRESENTED) An image extraction method, comprising:

a first image pickup step to pick up an image of an object positioned in front of a background using wavelengths in a visible light region;

a second image pickup step to pick up an image of the object positioned in front of the background using wavelengths in an infrared region; and

an extracting step to extract only the object based on the images picked up by the first and second image pickup steps,

wherein at least a surface of the background is formed by an organic dye.

2. (ORIGINAL) The image extraction method as claimed in claim 1, wherein said extracting step extracts the object from the image picked up by the first image pickup step depending on color, and extracts the object from the image picked up by the second image pickup step depending on luminance.

3. (ORIGINAL) The image extraction method as claimed in claim 1, wherein said organic dye has a color selected from a group consisting of blue-green color, gold color and silver color.

4. (ORIGINAL) The image extraction method as claimed in claim 1, wherein said organic dye is selected from a group consisting of cyanine organic dyes, phthalocyanine organic dyes, and azo organic dyes.

5. (PREVIOUSLY PRESENTED) An authentication apparatus, comprising:

a first image pickup section to pick up an image of an object positioned in front of a background using wavelengths in a visible light region;

a second image pickup section to pick up an image of the object positioned in front of the background using wavelengths in an infrared region;

an extracting section to extract only an image of the object based on the images picked up by the first and second image pickup sections; and

a matching section to compare the image extracted by the extracting section and registered object images, and to output a result of comparison as an authentication result,

wherein at least a surface of the background is formed by an organic dye.

6. (ORIGINAL) The authentication apparatus as claimed in claim 5, wherein said extracting section extracts the image of the object from the image picked up by the first image pickup section depending on color, and extracts the image of the object from the image picked up by the second image pickup section depending on luminance.

7. (ORIGINAL) The authentication apparatus as claimed in claim 5, wherein said matching section outputs the comparison result by comparing an average of the image of the object extracted by the extracting section from the image picked up by the first image pickup section and the image of the object extracted by the extracting section from the image picked up by the second image pickup section, and the registered object images.

8. (ORIGINAL) The authentication apparatus as claimed in claim 5, wherein the organic dye has a color selected from a group consisting of blue-green color, gold color and silver color.

9. (ORIGINAL) The authentication apparatus as claimed in claim 5, wherein the organic dye is selected from a group consisting of cyanine organic dyes, phthalocyanine organic dyes, and azo organic dyes.

10. (NEW) A method of extracting an object positioned in front of a background, comprising:

capturing a first image of the object using visible light and capturing a second image of the object using infrared light, the background including a surface formed by an organic dye, the organic dye having a color distinguishable in the visible light region from a color of the object, and having a luminance distinguishable in the infrared region from a luminance of the object.

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